

REMARKS

In the Office Action mailed from the United States Patent and Trademark Office April 4, 2006, the Examiner rejected claims 1, 6 and 15 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,391,005 to Lum et al. (hereinafter "Lum"), rejected claim 2 under 35 U.S.C. § 103(a) as being unpatentable over Lum in view of U.S. Patent No. 3,784,908 to Anderson (hereinafter "Anderson"), rejected claims 3-4, 7 and 11 under 35 U.S.C. § 103(a) as being unpatentable over Lum, rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Lum in view of U.S. Patent Application Publication No. 2004/0133081 to Teller et al. (hereinafter "Teller"), rejected claims 8, 10 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Lum in view of Anderson, and rejected claims 9 and 13-14 under 35 U.S.C. § 103(a) as being unpatentable over Lum in view of Anderson and Teller. Applicants respectfully provide the following:

Claims 1, 7, 11, 14, and 15 are amended in the current response.

Please replace the drawing sheet containing Figure 6 with the enclosed replacement sheet containing Figure 6. The replacement sheet contains a corrected legend properly identifying the displayed curves.

Rejections under 35 U.S.C. § 102

In the Office Action claims 1, 6 and 15 were rejected under 35 U.S.C. 102 (b) as being anticipated by Lum. In response, Applicants have amended claims 1 and 15 to more clearly define over the cited reference. M.P.E.P. 2131 sets forth the standard for a rejection of a claim as anticipated under 35 U.S.C. § 102. "To anticipate a claim, the reference must teach every element of the claim." M.P.E.P. 2131 states further,

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). . . . “The identical invention must be shown in as complete detail as is contained in the . . . claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Applicants respectfully submit that the reference cited by the Examiner fails to teach every element of the claim set as provided herein for the following reasons.

Independent claims 1 and 15 have been amended to recite a method for obtaining a electrical signal from a patient at the patient’s skin. In particular, claim 1 now recites “locating a probe in contact with the patient’s skin for measuring an electrical signal of a dermal area near a meridian,” and “measuring, at the skin, an electrical attribute corresponding to said meridian.” Claim 15 now recites “providing electrical feedback to a probe that is configured for measuring an electrical signal of a dermal area near a meridian,” and “measuring an electrical attribute at the patient’s skin corresponding to said meridian.” The amendments are supported by the specification as originally filed, as at page 5 lines 4-5, page 9 line 16, page 10 line 17, and page 14 line 15, for example. The amendments more clearly define over Lum in that the amendments clearly show that the electrical reading is obtained at the patient’s skin. In other words, Applicants’ claimed invention is non-invasive.

Such is simply not the case for Lum; Lum never discloses obtaining an electrical signal at the skin as is required by claims 1 and 15. Instead, Lum is directed to a penetrating needle that measures the impedance of the tissue being penetrated to achieve the proper depth of penetration. (Abstract) Nearly every paragraph of Lum discusses the penetrative nature of the Lum needle. The needle of Lum does not measure an electrical signal at the skin, but rather has an outer conductive material 125 and an inner conductive wire 123 separated by a non-conducting

material 116 (See Figure 2A and accompanying discussion.) so that as the needle penetrates the skin and then enters various tissues such as fat/adipose layer, blood vessels, capillary beds, etc. (Col 1 line 26-Col 2 line 23) the impedance of the tissue over the very short distance between the inner wire and the outer sheath of the needle is measured. (Col 6 lines 53-57) This measurement is not a measurement taken at the skin and corresponding to a meridian because the measurement taken by the needle of Lum is only significant as the needle penetrates the skin into other body layers. Therefore, for at least this reason, Lum does not teach every element of method claims 1 or 15.

In addition, in the Office Action, the Examiner rejected Applicants' method claims relying on the structure disclosed in Lum without showing that Lum discloses the method steps claimed. Specifically, claim 1 requires "locating a probe . . . near a meridian," and "measuring, at the skin, an electrical attribute corresponding to said meridian." (Emphasis added.) Lum does not teach these features of method claim 1. Lum is directed to a penetrative hypodermic needle described only as allowing the user to know how deep the needle has penetrated (see above discussion). Lum never discusses meridians in any way, shape, or form. Therefore, Lum cannot disclose or teach Applicants' claimed method steps for a method of obtaining an electrical signal at the skin which include locating a probe near a meridian and measuring an electrical attribute corresponding to the meridian at the skin. Therefore, for this additional reason, Lum does not teach every element of Applicants' method claims 1 or 15.

Indeed, the methods claimed by Applicants requiring that electrical attributes corresponding to a meridian be taken at the skin would simply not work if Applicants' probe were to penetrate the skin as is taught by Lum, as one of even passing skill in the relevant art would readily appreciate. If Applicants' claimed method were modified to be invasive and to

penetrate below the skin as the needle of Lum is required to do to perform its function, the electrical signals relating to the meridian would not be obtained. As is known by one of skill in the art of obtaining meridian signals at patients' skin, skin resistance and other electrical signals taken at the skin are vastly different than the resistance of underlying tissues and electrical signals taken when the skin is penetrated. Therefore, what is measured by the penetrative needle of Lum is vastly different than what is measured by the claimed invention. One using the needle of Lum must first penetrate the skin before a resistance measurement of any value to the Lum invention may be obtained, while penetrating the skin to take an electrical reading clearly negates Applicants' claim language requiring that the electrical attribute corresponding to a meridian be taken at the skin.

Claim 6 depends from claim 1 and is at least allowable for the same reasons. Applicants therefore respectfully request removal of all rejections under 35 U.S.C. § 102, as the cited reference fails to teach every element of the claim as is required for a rejection under Section 102.

Rejections under 35 U.S.C. 103

Applicant respectfully submits that the claim set as provided herein is not made obvious by the cited references. The standard for a Section 103 rejection is set forth in M.P.E.P 706.02(j), which provides:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or suggest all the claim limitations.** The teaching or suggestion to make the claimed combination and the reasonable

expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

(Emphasis added). Applicants respectfully submit that the references cited by the Examiner, either alone or in combination, do not teach or suggest all the limitations contained in the claim set provided herein. Applicants also respectfully submit that there is no suggestion or motivation to combine the references in the manner suggested by the Examiner, and that one of skill in the art would not reasonably expect success in combining the references in the manner provided.

As discussed above, independent method claims 1 and 15 contain limitations regarding the obtaining of electrical signals at the skin and attributes corresponding to meridians. Independent method claims 7 and 11 have also been amended to contain similar limitations and are allowable for at least the same reasons. Teller makes absolutely no mention of meridians or acupuncture points, and is not related to making measurements at such points, and neither Teller nor Anderson disclose the claimed method of applying pressure to a probe tip based on electrical feedback to achieve an electrical reading at a patient's skin. Thus, none of the cited references, alone or in combination, disclose the limitations discussed above with respect to claims 1 and 15 and contained in all independent and dependent claims.

Furthermore, Applicants respectfully submit that one of skill in the art would not be motivated to combine references in the manner suggested by the Examiner. In the Office Action, the Examiner proposed a combination of Lum and Teller, indicating that the motivation to combine the references would be for the "purpose of providing [an] abrasive surface contacting the dermal area of a patient." Applicants respectfully disagree. As is abundantly clear by reference to Lum, the Lum patent is directed entirely to a penetrative needle. As the needle is designed to penetrate tissue, Lum repeatedly emphasizes that the needle tip is not an abrasive

bristly surface (as is claimed by Applicants), but is a sharp tip for penetrating. (See Col 2 lines 65-67, Col 3 line 66-Col 4 line 2, Col 3 lines 64-65, Col 4 lines 13-14, Col 4 lines 45-46, for example, as well as the needle shapes disclosed in Figures 1, 2A, 4, 5A, 6A, 6B, 7A, 7B, 8, and 9.) In contrast, the sensor disclosed in Teller does not rely on penetration of the skin, penetration is undesirable for that sensor, and the large sensor is not capable of penetrating the skin absent the infliction of undesirable blunt-force trauma to the user. One of skill in the art would never think to put the large bumpy surface of Teller on the end of a needle such as that disclosed in Lum as the surface would instantly and completely prevent the needle of Lum from performing its primary function.

Applicants therefore respectfully submit that one of skill in the art would not be motivated to combine Lum and Teller, and would not expect success in doing so. Instead, Applicants respectfully submit that the Examiner must be relying on impermissible hindsight reasoning to attempt to reconstruct Applicants' claims in a way that is not allowable. "Hindsight reconstruction" cannot be used "to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." Ecolochem, Inc. v. S. California Edison Co., 227 F.3d 1361, 1371 (Fed. Cir. 2000) (quoting In re Fine, 837 F.2d 1071 (Fed. Cir. 1988)). Rather, "the best defense against hindsight-based obviousness analysis is the rigorous application of the requirement for a showing of a teaching or motivation to combine the prior art references." *Id.* "Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability-the essence of hindsight." *Id.* (quoting In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999)). That hindsight reconstruction was used here is evident from the fact that the Examiner

did not rely on any particular disclosure from either Lum or Teller as providing the alleged motivation to combine references.

Applicants also respectfully note that the Examiner has cited no passage of Lum or Anderson that shows any particular motivation to combine the references in the manner suggested by the Examiner. Rather, the Examiner merely indicates that one of skill in the art would combine the references “for the purpose of providing an audible indication of the dermal area with substantial electrical signal.” Again, Applicants respectfully submit that the Examiner has relied on impermissible hindsight reconstruction in making the proposed combination. The system of Anderson relies on a change in the audible frequency to alert a user that a proper skin location has been found. For a human user to detect and respond to such a change in frequency takes a fairly long amount of time that is perfectly acceptable in a non-penetrative environment where a non-penetrative electrode such as the one disclosed in Anderson is being passed over the surface of the skin. In contrast, it is entirely improper in an invasive penetrative procedure such as the one disclosed in Lum where a needle is penetrating the skin of a patient and causing pain. In fact, Lum teaches away from such a long response delay to the penetration time based on an auditory frequency response. (See Lum Col 1 lines 16-21.) As anyone familiar with the lancets frequently used by diabetics for blood sampling, and to which Lum is addressed in part (Col 1 lines 28-30), prolonging the penetration of the lancet as depth is measured by listening to an auditory frequency change is simply undesirable and unacceptable. Therefore, Applicants respectfully submit that one of skill in the art would not be motivated to combine Lum and Anderson to obtain an auditory signal for Lum’s penetrating needle system when the computer system already disclosed by Lum can automatically respond almost instantaneously. (Col 3 lines 24-27)


Therefore, because the cited references fail to teach or suggest every claim limitation, because there is no motivation to combine references in the manner proposed by the Examiner, and because one of skill in the art would not expect success in arriving at the claimed invention by making the proposed combination, Applicants respectfully submit that the claims are not made obvious by the cited combination of references. And, since the prior art references do not make obvious the independent claims, Applicant respectfully submits that the prior art references cited by the Examiner do not make obvious the corresponding dependent claims. Applicants therefore respectfully request removal of all rejections under 35 U.S.C. § 103(a).

CONCLUSION

Applicants submit that the amendments made herein do not add new matter and that the claims are now in condition for allowance. Accordingly, Applicants request favorable reconsideration. If the Examiner has any questions or concerns regarding this communication, the Examiner is invited to call the undersigned.

DATED this 19 day of January, 2007.

Respectfully submitted,



Michael F. Krieger
Attorney for Applicant
Registration No. 35,232

KIRTON & McCONKIE
1800 Eagle Gate Tower
60 East South Temple
Salt Lake City, Utah 84111
Telephone: (801) 321-4814
Facsimile: (801) 321-4893

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